

NOVEL MICRO ARRAY FOR HIGH THROUGHPUT SCREENING

Abstract: Array based fluid is stored in through holes that extend through a substrate. Combined capillary and hydrophylllic forces are used to retain the fluid and also transfer it to other substrates of similar type. In another embodiment vacuum and pressure forces are used to introduce the fluid and remove the fluid from the known through holes and transfer the remaining fluid to other substrates. In yet another embodiment, electrokinetic forces are used to retain and move the fluids across the substrates via the through holes. The substrates are aligned and the fluids are transferred or mixed based on the above techniques.